

State of Wisconsin/Department of Transportation
RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: Mar 31, 2002

Program: SPR-0010(36) FFY99		Part: II Research and Development	
Project Title: Guidelines for Selection of PG Binders for Asphalt Mixes		Project ID: 0092-01-01	
Administrative Contact: Nina McLawhorn		Sponsor:	
WisDOT Technical Contact: Tom Amon		Approved Starting Date: Nov 15, 2000	
Approved by COR/Steering Committee: \$99,829.00		Approved Ending Date: May 15, 2003	
Project Investigator (agency & contact): Hussain Bahia: UW-Madison			

Description: Error! Bookmark not defined.

Total study budget	Current FFY budget	Expenditures for current quarter	Total Expenditures to date
\$99,829.00	\$33,276.33	\$5,313.69	\$40,448.28

Progress This Quarter:

(Includes project committee mtgs, work plan status, contract status, significant progress, etc.)

Work this quarter included updating the analysis for data collected from laboratory tests and its interpretation in accordance to the previously chosen protocols for the project. An Interim Report has been written to summarize the findings from this analysis. This report contains all the analysis of the lab test data conducted until now and useful findings. The recommendation for selection of the asphalt binder for each local area will be made after completion of the testing for all binders and based on the analysis and interpretation of the results.

Other than the computer-related problems which were resolved early in the semester, the testing have continued without major problems. For rutting tests an updated version of the software has been used. This software enables the DSR machine to collect the rutting data for 100 cycles instead of 80 cycles. The advantage of this new software is the removal of the inconsistency usually shown in fitting curves of rutting between the 16-cycle loops used before. Table 1 shows the updated progress in testing of binders completed this quarter.

Work Next Quarter:

All the laboratory tests are in progress. Some of tests are planned to be re-run to evaluate the repeatability of results. The main goals in the following quarter will be completion of the rutting tests and a continuance of the low-temperature tests such as the BBR and the DTT.

It is hoped to have these tests completed during the next quarter. In addition to the laboratory tests, the performance of the tested binders will continue to be evaluated by analyzing and summarizing the collected data.

Circumstances affecting progress/budget:

Over the latter half of this quarter the work on this project was slowed by a few machine-related problems. One is breakage of the DTT loading frame; the control box in it has been out of order and in the process of being repaired. It is expected to restart running the DTT tests within a couple weeks. The other problem is the temperature control system of the BBR. The problem with this system is maintaining the temperature with fluctuation. It is planned to find out the exact problem in it and fix it as soon as possible. At least one undergraduate student has been sought to help the research team for this summer.

Binder	PG Grade	Modifier	Testing Types									
			Workability (Viscometer)	Particulate Additive Test	Storage Stability (LAST, DSR)	Mass Loss (RTFO)	Long Term (PAV)	Rutting (DSR)	Fatigue (DSR)			
										BBR	DTT	TG
	Main Operator		Karin	Chris	Chris	Karin	Karin	Kitae	Kitae			
C5	PG 58-28	-	Completed	Completed	Sampled	Completed	Completed	Completed	Completed	Completed	Completed	Completed
B3	PG 76-28	Elvaloy	Completed	Completed	Sampled	Completed	Completed	Completed	Completed	Completed	Completed	Completed
A3	PG 64-28	SBS	Completed	Completed	Sampled	Completed	Completed	Completed	Completed	Completed	Completed	Completed
B2	PG 64-28	Elvaloy	Completed	Completed	Sampled	Completed	Completed	Completed	Completed	Completed	Completed	Completed
D1	PG 64-28	SB	Completed	Completed	Sampled	Completed	Completed	Completed	Completed	Completed	Completed	Completed
C4	PG 64-22	SBS	Completed	Completed	Sampled	Completed	Completed	Completed	Completed	Completed	Completed	Completed
B5	PG 64-34	Elvaloy	Completed	Completed	Sampled	Completed	Completed	Completed	-	Completed	Completed	Completed
D2	PG 64-34	SB	Completed	Completed	Sampled	Completed	Completed	Completed	-	Completed	Completed	Completed
B8	PG 70-34	Elvaloy	Completed	Completed	Sampled	Completed	Completed	Completed	-	Completed	-	Completed
A1	PG 70-28	SBS	Completed	Completed	Sampled	Completed	Completed	Completed	-	Completed	-	Completed
B4	PG 70-28	Elvaloy	Completed	Completed	Sampled	Completed	Completed	Completed	-	-	-	Completed
C2	PG 70-28	-	Completed	Completed	-	Completed	Completed	Completed	-	-	-	Completed
B6	PG 76-34	Elvaloy	Completed	Completed	-	Completed	Completed	Completed	-	-	-	Completed
B7	PG 58-40	Elvaloy	Completed	Completed	-	Completed	Completed	Completed	-	-	-	Completed
B9	PG 58-34	Elvaloy	Completed	Completed	-	Completed	Completed	Completed	-	-	-	Completed
D4	PG 58-34	SB	Completed	Completed	-	Completed	Completed	-	-	-	-	Completed
C6	PG 76-28	SBS	Completed	Completed	-	Completed	Completed	-	-	-	-	Completed
D5	PG 64-40	SB	Completed	Completed	-	Completed	Completed	-	-	-	-	Completed
D6	PG 70-34	SB	Completed	Completed	-	Completed	Completed	-	-	-	-	Completed

Table 1. The Completed Tests by This Quarter

Gantt Chart:

PROJECT I.D.		STARTING DATE	COMPLETION DATE		MONTH		REPORT #						PERCENT OF			
PROJECT # WISDOT		NOV 01, 2000	MARCH 31, 2003		M A R 1 5		6									
CONSULTANT FIRM NAME			% TIME ELAPSED			TOTAL PROJECT FUNDING			CONTRACT FUNDING			Project	Task Complete Last Report	Task Complete This Report	Project Complete	
UNIVERSITY OF WISCONSIN - MADISON			50.00%			100%			100%							
NAME OF STUDY																
GUIDELINES FOR PG BINDER SELECTION IN WISCONSIN																
TASK *		YEAR	20 00	2 0 0 1			2 0 0 2			20 03						
		MONTH	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 5	Qtr 6	Qtr 7	Qtr 8	Qtr 9					Qtr 10
TASK 1 : Review National and Regional Guidelines													10	5	5	10
TASK 2 : Conduct Binder Evaluation Laboratory Study													35	21	7	28
TASK 3 : Establish initial PG binder selection guidelines for Wisconsin													10	2.5	2.5	5
INTERIM REPORT													5	0	5	5
TASK 4 : Field Study													30	0	0	0
TASK 5 : Final Report													10	0	0	0
SHOW PROGRESS BY USE OF A BAR CHART:		SCHEDULED											100			48
		COMPLETED														

Note: Gantt chart shown in State Fiscal Year Quarters